



Geotourism, GeoRegions, Geotrails, and Geoparks A Regional Development Opportunity for Australia

Information Bulletin of **Geotourism Australia**¹ issued by Coordinator Angus M Robinson,
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Purpose

This briefing provides background information to assist state and local government agencies and others in assessing the potential for the development of major geotourism projects (including geotrails and geoparks) within identified and approved GeoRegions of Australia. The first part of this briefing (pps 1-8) provides a summary overview, followed by several Appendices which provide detailed information about the range of activities underpinning geotourism development in Australia.

Current Status

The Australian Geoscience Council Inc (AGC) is the Peak Council of geoscientists in Australia. It represents eight major Australian geoscientific societies and professional institutes with a total membership of over 8,000 individuals comprising industry, government, and academic professionals in fields including geology, geophysics, geochemistry, mineral and petroleum exploration, environmental geoscience, geotourism, hydrogeology, geomorphology, geomechanics, and geological hazards.

A National Geotourism Strategy (NGS) was launched by the AGC on 7th April 2021 following a period of strategic policy development by an appointed Reference Group <https://bit.ly/34lfCjq>. To date, seven key strategic goals have been implemented by a series of working groups that are being directed by a Steering Committee which includes Chairman Dr Jon Hronsky OAM, Immediate Past Chairman of the AGC, the seven working party chairs (refer **Appendix A** and link below), as well as representatives of three key constituency groups (i.e., Dr Sandra Close AM representing Mining Heritage, Matt Saddler representing Aboriginal Perspectives, and Dr Peter Mitchell OAM representing environmental sciences and communities. <https://bit.ly/3yWex5u>

The NGS is being implemented to support the orderly development of major geotourism projects and activities in line with overseas trends and domestic regional development imperatives. The AGC sees the articulation of a strategy with a staged and incremental approach as being essential to gain government endorsement at all levels. The development of a National Ecotourism Strategy in 1994 and subsequent state/territory-based initiatives is considered as a particularly useful precedent and guide. Of significance internationally is the development of geotourism in Australia that lags many countries' approaches, notwithstanding the fact Australia has taken the initiatives in several areas in development of the concepts underpinning geotourism.

¹Geotourism Australia is a wholly owned entity of the AGC.

Over the past four years the NGS has made considerable progress in all areas embraced by these strategic goals, not only the issue of resolving the geopark impasse. Notwithstanding this success, the NGS Steering Committee has recognised that several challenges need to be addressed. These include the following.

1. To position far more effectively in the minds of the geoscience profession that the outcomes of the NGS are leading to geotourism being accepted as a growing area of geoscience field of expertise, both here in Australia and overseas.
2. To determine a placement for geotourism development within a vehicle that will extend beyond the life of the NGS.

To address these challenges, the AGC Executive has approved a recommendation of the Steering Committee that it (and all participants currently registered as working group participants) be constituted within a newly branded grouping within AGC to be known as Geotourism Australia using the current structure and relationships with the AGC. In short, all working group members can consider themselves an integral part of the newly branded entity. This decision was announced at the AGM of the AGC on 4th April 2024.

On this basis, it has been agreed that no changes will be made to responsibilities and roles, although it is recognised that this change provides for an opportunity to create new pillars of activity that have arisen from the NGS outcomes so far. A review of the strategic settings of the NGS was undertaken at the end of 2024. The outcomes of this review are summarised on pages 13-17.

At its March 2026 meeting, the Steering Committee has approved a further change to move from Working Group Leadership to Theme Leadership with responsibility for service offering of domain expertise for advising purposes with the opportunity to engage in specific projects according to availability and interest levels. Each Theme Leader will be provided with the opportunity, subject to regular consultation with the Steering Committee, to fine-tune NGS goals as they see fit. Each Theme Leader can reach out to a wider group of individual geotourism members for advice or engagement as deemed appropriate.

It should be noted that information about Geotourism Australia can readily be accessed through the Internet through the domain www.geotourismaustralia.org.au

The NGS has recognised that geotourism adds considerable content value to traditional nature-based tourism (the primary motivator of travel to Australia) as well as cultural tourism, inclusive of Aboriginal tourism, thus completing the holistic embrace of 'A' (abiotic – sky, climate, landscape, and geology) plus 'B' (biotic – flora and fauna) plus 'C' (culture) aspects. Geotourism has been defined as 'tourism which focuses on an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment', but it is not a niche market. It has links with adventure tourism, cultural tourism, ecotourism, astrotourism, and agritourism, but is not synonymous with any of these forms of tourism, although in broad terms it embraces them all because it is essentially 'place based.' Geotourism embraces ecotourism, because the latter is practised in protected areas such as national parks whereas **geotourism is undertaken in all areas, including places where primary industry activities are being undertaken, and in areas with Aboriginal land tenure.**

The pursuit of geotourism offers the potential for new industries and employment opportunities through the development of major projects within Australia. Also, very significantly from a strategic perspective, the AGC recognises that the development of geotourism may be one of the best ways to

communicate the value of geoscience to the broader Australian community. The AGC considers that this improved profile for geoscience is likely to have a positive impact in other areas of strategic importance, most notably the need for continuing tertiary enrolments in geoscience, which is required to meet Australia's needs for highly qualified geoscience graduates and researchers into the future. There is an Australia-wide decline in students choosing to major in geology and opting for other study pathways within environment and science. Geotourism may be an effective way to help reverse this trend by making geoscience a greater part of the lived experience for typical Australians.

By way of comparison, the evidence from a 2012 study in Ireland demonstrated that the geotourism and geoheritage sector was considered a major contributor to the Irish economy, with total revenues (visitor expenditures) directly attributable to this sub-sector amounting to over €370 million in 2016, while the sector, directly contributes almost €240 million to Irish economy GVA/GDP. The sector supported 8,767 FTEs on an economy-wide basis, as well as €415 million in GVA and over €660 million in output (Source: An Economic Review of the Irish Geoscience Sector prepared by Indecon International Economic Consultants). In developing economies such as Indonesia, the impact of geotourism development through the establishment of geoparks has been substantial in raising GDP per capita <https://bit.ly/3ykis0J>

The benefits of geotourism development in Australia are many.

Tourism Industry development benefits can be realised through the holistic approach of geotourism which enhances the value of traditionally structured, nature-based tourism by generating new product development (i.e., including geology, landscape, flora, and fauna, as well as cultural heritage attributes, both Aboriginal and post European settlement).

Employment benefits through the adoption of a strategy to support and promote geotourism include the following, all of which have the potential to significantly improve Aboriginal employment, and more broadly, regional employment.

- New domestic employment and consulting opportunities for natural/cultural heritage professionals – design of interpretation signage/boards, design of geotrails etc.
- Management roles in geoparks and mining parks, regional development, and local government agencies.
- Flow-on employment in tour operations and townships resulting from increased tourism visitation.
- Opportunities for pastoralists to develop 'farm stay' and 'station stay' tourism operations.

Societal benefits for local communities, particularly in rural and regional Australia and for First Nations peoples include the following.

- A mechanism for celebrating and raising awareness of mining heritage, past and present.
- An opportunity to enhance community engagement and build value into Environmental, Social, and Governance (ESG) considerations.
- By celebrating geological heritage, and in connection with all other aspects of the area's natural and cultural heritage (and most significantly, Aboriginal heritage), geotourism enhances awareness and understanding of key issues facing society, such as using our Earth's resources sustainably.
- By raising awareness of the importance of the area's geological heritage in society

today, geotourism gives local people a sense of pride in their region and strengthens their identification with the area.

- The strategy acknowledges the need to protect the scientific and cultural sensitivity of some geoheritage and geosites, and to ensure protection from geotourism where appropriate.

In summary, the over-riding socio-economic benefits of geotourism are measurable economic outcomes through enhancement of traditional nature-based tourism - additional visitors, direct and regional economic output, household income, and wages, and local (including Aboriginal) employment.

This strategy will support the economic benefit by:

- Establishment of a higher level of central coordination in areas of product development, travel and hospitality services, and tourism promotion, with a view to improving the overall visitor experience, consistency of the branding, and leading to an increase in visitor numbers.
- Maximisation of sustainable development and management of 'over tourism' with a focus on the implementation of positive impact measures.
- Establishment of a framework for focus on the 10 UNESCO Topics including culture, education, climate change, geoconservation etc.
- Maximisation of community engagement.

Geotourism can be readily delivered through the development of both 'geotrains' and 'geoparks', the latter within identified GeoRegions.

In recent years, discernible changes in visitor needs and behaviors are starting to emerge. e.g.

- An increased interest in nature-based activities, evidenced anecdotally from observations in overseas geoparks.
- A shift from large group to small (family) group tours and free and independent travelers.
- A move to patronising tourist destinations 'close to home.'
- An increased usage and dependence on the internet for purchasing and information gathering purposes.
- A higher level of interest by governments to create employment opportunities and to support regional tourism.

The consideration of well-considered proposals underpinning the NGS is timely and is likely to be well received by governments, the tourism industry, and regional communities across Australia <https://bit.ly/37JSjrr> as evidenced in the release in March 2022 of the Australian Government's THRIVE 2030 Visitor Economy Strategy, now to be directed by the Office of Tourism and the Visitor Economy Austrade's Canberra office which was launched on 3 November 2025 by the Assistant Minister (Northern Australia, Tourism and Pacific Island Affairs). It is reported that the establishment of the office is an opportunity to elevate the profile of Austrade's tourism and visitor economy functions and unlock further impact through deeper integration of Austrade's trade, investment, and tourism priorities. At the launch, the Assistant Minister outlined the Australian Government's priorities in delivering the THRIVE 2030 strategy, including increasing tourism spend in regional communities and tackling longstanding workforce challenges to ensure the industry has the skills needed to drive sustained growth and visits from international and domestic tourists.

Geotrains

A geotrail can deliver geotourism experiences through a journey underpinned by an area's geology and landscape. Geotrails are therefore best constructed around routes currently used by tourists i.e., geotrails should form logical journeys linking accommodation destinations where appropriate.

Geotrails can comprise roads (including stock routes), walking and biking trails, and disused railway easements. Geotrails should meld the geological heritage features of a region with a cohesive story and should incorporate and package in the biodiversity and cultural components (including mining heritage) of the region through which the geotrail traverses. Geotrails do offer the advantages of having universal appeal, and do not compete with or impact on land management/access issues. They are easy to establish and represent a very cost-effective means of enhancing regional development.

They are also an effective vehicle for promoting broader community interest in Geoscience and recognition of it as one of the four fundamental sciences along with Physics, Chemistry and Biology. As such there are long-term educational and cultural benefits in fostering the appreciation of how our Earth influences landscape, ecology, and our lifestyles.

Western Australia's Mid-West Development Commission (MWDC) has been working with seven shire councils to establish WA's first major geotourism development to be built on a geotrail model, focused on the Murchison GeoRegion of WA. The MWDC believes that the ancient Murchison geology provides the ideal platform for unique, nature-based tourism experiences of global significance, particularly to the 'experience seeker / dedicated discoverer' market. The Mid West Tourism Development Strategy (2014) concluded that the region's iconic nature-based tourist attractions were not developed to their potential and that its visitor appeal was not fully realised. The Strategy identified geotourism in the Murchison sub region as a potential 'game changing' tourism initiative, with capacity to help the region develop as a major tourism destination.

More information about geotrails is detailed in **Appendix B**.

GeoRegions and Geoparks

In Australia, creating a GeoRegion as a local initiative represents the first step in evaluating its potential development for major geotourism projects including its future potential elevation to a UNESCO-identified Global Geopark. A GeoRegion is therefore an area defined by a potential geopark proponent having ideally completed an approved tourism destination management plan. Embracing the GeoRegion designation means that the proponent now wishes to seek agreement from the State/Territory Geological Survey and other State-based entities or agencies to designate a defined area of natural and cultural heritage which highlights outstanding geological and geoheritage features.

More information about GeoRegions and Geoparks is detailed in **Appendix C**. Moreover, the encapsulating relationship between geotourism, GeoRegions and geoparks is summarised at <https://bit.ly/49dwwor> and explained further in the link <https://bit.ly/3O0gs1o>

Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks.' A geopark is a unified area with geological heritage of particular significance and where that **heritage is being used to promote the sustainable development of the local communities who live there.**

Unlike World Heritage Areas and national parks, geoparks can embrace both protected and any resource extraction areas, focusing on sustainable development objectives. Geoparks also focus on community engagement and ownership. In Australia, national parks focus only on biodiversity and often with insufficient attention given to geological heritage.

UNESCO Global Geoparks are single, **unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education, and sustainable development.** Whilst World Heritage Areas and national parks are created in perpetuity, the status of global geoparks is reviewed by UNESCO every four years. A most helpful infographic about the UNESCO Global Geopark program can be sighted at <https://bit.ly/3RzjxZ2>

Whilst a geopark must demonstrate geological heritage of particular significance, the purpose of a geopark is to explore, develop and celebrate the links between that geological heritage and all other aspects of the area's natural, cultural, and intangible heritages. It is about reconnecting human society to all levels to the planet we all call home, and to celebrate how our planet and its 4,600-million-year long history has shaped every aspect of our lives and our societies. Geoparks are both a regional development concept as well as a branding tool. They achieve these goals through conservation, education and geotourism. **Geoparks can comprise both protected and non-protected areas and enable and celebrate sustainable development of primary industries such as mining, agriculture, and forestry.**

Geoparks can choose to evolve through a series of levels from aspiring, national, regional (e.g., European or Asia-Pacific Regions) to global.

On 21st February 2019, the fourth open session of the International Geoparks Programme took place in Paris and determined that the new aspiring geopark applications for the UNESCO Global UNESCO member countries are entitled to nominate a maximum of two applications per year. During 2017, two Pre-Aspiring Global Geopark proposals had been advanced in Australia by local government authorities in Queensland (the Etheridge proposal) and in New South Wales (the Warrumbungle proposal). Under the UNESCO Global Geopark operational guidelines, applications are only accepted annually between 1 October and 30 November. Before any formal application can be made, the proponent of any UNESCO Global Geopark must submit an expression of interest, usually before the 1st of July, via the official channel as defined by the Australian National Commission for UNESCO or government body in charge of relations with UNESCO, involving, if applicable, a 'National Geoparks Committee'.

In 2018, following consultations with the national government geoscience agency, Geoscience Australia, it was recognised that a national approach was needed to better manage major geotourism projects to maximise these indicative benefits and to take account of current perceived government and community group concerns.

Geotourism Projects and the National Geotourism Strategy (NGS)

The AGC, through the auspices of Geotourism Australia, has been of the view that the establishment of the NGS offered the best means of ensuring an orderly development of geotourism based on having first gained government support and endorsement, recognising that each state and territory has individual needs and priorities.

The AGC also recognises that the Australian Government's THRIVE 2030 Visitor Economy Strategy (released in March 2022) sets out to assist the tourism industry and governments in setting a plan for

sustainable long-term growth of the visitor economy over the next ten years. It is underpinned by a vision that delivers quality experiences for visitors, includes businesses that are globally competitive that are profitable, grow sustainably and providing jobs, growth and infrastructure that benefit Australian communities.

One of the key Actions (7.5) of this strategy is to ‘grow and develop high-quality products and experiences around unique Australian locations and themes, including approaches which integrate sustainable nature tourism with economic opportunities for Traditional Owners, **and reflect emerging tourism trends such as geotourism.**’ The AGC is pleased to see that the goals of the AGC’s National Geotourism Strategy (NGS), launched nearly four years ago, are complementary to this Action, and that there is recognition within the THRIVE 2030 Strategy for the need to integrate natural and cultural heritage. These are core to the design of geotourism offerings. The inclusion of a geotourism case study within the Strategy documentation – the NSW Glen Innes Highlands GeoRegion – represents a major step in formalising and advancing geotourism concepts.

Recommendation for Geopark Proponents

Australian Government Geoscience agencies (GWG) have previously advised the AGC that while they support in principle the establishment of GeoRegions and geotrails, they are not able to collectively endorse the UNESCO Global Geoparks currently, but have subsequently agreed that individual jurisdictions with approved GeoRegions in place may decide to consider any geopark nomination proposal that might arise through a process (**the Geopark Assessment Process**) that has now been approved in late 2025 by the GWG.

The agreed **Geopark Assessment Process**, comprising three distinct stages, assumes that a GeoRegion designation (Stage 1) has been approved in principle by appropriate land managers and LGAs based on the endorsement received from the relevant State/Territory Geological Surveys and has, or is developing an approved governance structure (e.g. if it encompasses an LGA, then LGA governance arrangements can apply; if a multi-stakeholder or a community group is involved, then a relevant governance structure and trading identity may need to be established). Prior to commencing Stage Three, it is expected that Stage 1 and the subsequent Stage 2 activities (i.e. geotrail development) have been carried out as stipulated in the approved attached ‘Guidelines for the Development of GeoRegions’ also referenced at <https://bit.ly/47Nappn>

The **Geopark Assessment Process** has now been subsequently approved by the Executive of the Australian Geoscience Council following review and endorsement by the Australian Department of Climate Change, Energy, the Environment, and Water (DCCEEW) and is now available on the AGC website at

https://www.agc.org.au/wp-content/uploads/2025/12/Geopark-Assessment-Process_final.pdf

noting that it **does include a Caveat issued by DCCEEW** that states, inter alia.

The Australian Government is the State Party to UNESCO and is responsible for any interactions with UNESCO on its treaties, conventions, or programs. At this stage there is no intent by the Government, nor formal ministerial approval, for Australia to engage with the Geoparks program. The inclusion of potential stage five activities should not be considered an endorsement by the Government that any geopark assessment would be commenced.

This process has also been explained in a more recent communication, which includes a powerpoint presentation issued by Geotourism Australia <https://www.agc.org.au/wp-content/uploads/2026/05/Pathway-to-UNESCO-Global-Geopark-Nominations.pdf>

The AGC Executive has also forwarded copies of the document for information to the Australian Minister for the Environment and Water, to State Government Premiers and Territory Chief Ministers, GWG members, to the proponents of the three approved GeoRegions (i.e. Murchison in WA, and Glen Innes Highlands and Ku-ring-gai (both in NSW), Minister Jackie Jarvis, Minister for Mid West (WA), the heads of the WA Regional Development Commissions, and both the WA and NSW Local Government Associations.

On a related matter, a notice has been placed on the website of the Geological Survey of Western Australia that recommends the establishment of GeoRegions as a first step in advancing any geopark proposals.

<https://www.wa.gov.au/organisation/departments/mines-petroleum-and-exploration/geological-survey-of-western-australia/geotourism-and-geoheritage>

The notice states that as ‘an Australian initiative, GeoRegions define areas where sites of geological significance are connected by a unifying theme. They can also serve as a pathway towards UNESCO Global Geopark recognition. GeoRegions can provide a sustainable framework for geotourism that recognises and celebrates local communities, geology, culture, and nature. Establishing a GeoRegion involves collaboration between local governments, community and business groups, and Traditional Owners. Geological Surveys across Australia, along with other government agencies, are consulted throughout this process.’

The notice also states that ‘GeoRegions are grassroots projects that rely on local knowledge, engagement, and governance. The Australian Geoscience Council has published guidelines for the development of GeoRegions, and UNESCO provides helpful resources on its Geoparks website.’

In addition, it has been recognised that prior to the establishment of the national framework, several Western Australian initiatives, supported by the **Australian Geoparks Network (AGN) and GeoparksWA, developed as community-based ‘local geoparks’**. These Local Geoparks are defined and assessed by GeoparksWA to meet many of the UNESCO guidelines for development as geoparks that have significant abiotic, biotic and cultural features, and have a legally incorporated community-based organisation with a locally based management board that aspires towards becoming a UNESCO Global Geopark. Discussions have been held with the AGN and GeoparksWA representatives to determine a mechanism that will enable these projects to be included for assessment under the new government approved arrangements. It is hoped that this integrated approach provides, for the first time, a nationally consistent and government-endorsed pathway from community-led initiatives to potential UNESCO Global Geopark recognition.

It is therefore strongly recommended that geopark proponents, using the mechanism of ‘GeoRegions’, explore various alternative options for geotourism development, including a strong focus on the establishment of geotrails between sites of geological merit as interpretive sites, including robust geoheritage sites, some of which may already have been established as geological ‘monuments’ or recognised in state or national geoheritage registers. As a first step, a full audit of natural and cultural heritage attributes in the region as well as early discussions with state/territory based Geological Surveys, Planning and Environment agencies, and any other state/territory government agencies responsible for land and resource management is recommended. More details about GeoRegions are set out in guidelines as approved by government geoscience agencies, see **Appendix D**.

ATTACHMENTS

Appendix A Definition and Benefits of Geotourism

Geotourism is an established concept in many places around the world, especially Europe, North America, and China. Geotourism is defined by the US National Geographic Society (and updated by the [Arouca declaration in 2011](#), as ‘tourism that sustains or enhances the distinctive geographical character of a place—its geology, environment, heritage, aesthetics, culture, and the well-being of its residents’. Importantly, geotourism is heavily endorsed by UNESCO and supports a range of [UNESCO Sustainable Development Goals](#). The Geological Society of Australia has subsequently defined geotourism as ‘sustainable tourism which focuses on an area’s geology and landscape as the basis for providing visitor engagement, learning and enjoyment.’

In March 2026, the Steering Committee of Geotourism Australia approved the following **updated definitions** as follows.

Official Definition (Governance and Policy)

“Geotourism is a place-based form of sustainable tourism that safeguards Earth’s geodiversity and geoheritage while strengthening interconnected biodiversity, cultural values, and the wellbeing of host communities. It achieves this through inclusive stewardship, meaningful interpretation, positive-impact practices and measurable outcomes that benefit people, place, and planet.”

Companion Definition (Public-Facing)

“Geotourism is sustainable, place-based tourism that connects people with Earth’s landscapes, heritage, and communities, while protecting their natural and cultural values for future generations.”

The rationale for this amendment is detailed at <https://bit.ly/48sEnRR>. For further details about understanding geotourism, refer also to <https://bit.ly/3O0gs1o>

In summary, geotourism

- adds considerable content value to traditional nature-based tourism (the primary motivator of travel to Australia) as well as cultural tourism, inclusive of Aboriginal tourism, thus completing the holistic embrace of ‘A’ (abiotic – sky, climate, landscape, and geology) plus ‘B’ (biotic – flora and fauna) plus ‘C’ (culture) aspects. It emphasises an approach of increasing interest to protected area managers, particularly given the experience gained from the former Australian National Landscape Programme.
- celebrates geoheritage and promotes awareness of and better understanding of the geosciences - of increasing interest to geological survey organisations;
- contributes to regional development imperatives in areas experiencing social and economic difficulties through increased tourist visitation, particularly from overseas – of increasing interest to local government authorities (LGAs) and state based, regional development commissions and agencies;
- creates professional and career development for geoscientists – of particular interest to the AGC and constituent member societies;
- provides a means of highlighting and promoting public interest in mining heritage – of particular interest to The Australasian Institute of Mining & Metallurgy (The AusIMM),

- the Sydney Minerals Exploration Discussion Group (SMEDG), the Australasian Mining History Association (AMHA), and the Australian Institute of Geoscientists (AIG);
- provides the means of increasing public access to geological information through a range of added information and communication technology (ICT) driven applications e.g., smartphones, drones, 3D visualisation, augmented/virtual reality etc. – of increasing interest to geological survey organisations and visitor information centres; and
- engenders an increasing awareness of the importance of geology as a fundamental science that has had and will continue to have major impacts on civilisations.

Geotourism promotes tourism through visits to geological features (geosites), use of ‘geotrails’ and viewpoints, guided tours, geo-activities (such as geological time trails, fossil walks, rock gardens etc.), and patronage of visitor centres and museums. Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities.

Signature Experiences

Tourism Australia has from time to time been marketing Australian tourism destinations through a program focused on ‘signature experiences.’ These include (from a geotourism perspective) biotic experiences such as ‘Australian Wildlife’ and cultural experiences such as ‘Cultural Attractions’ and ‘Discover Aboriginal Experiences’ as well as four activity-based experiences (i.e., fishing, golfing, wine tasting, and iconic walks) and one hospitality experience focused on luxury lodges. Abiotic experiences such as ‘GeoRegions’ have been overlooked despite the fact that the 2017 report ‘Unlocking Our Great Outdoors’ of the Tourism and Transport Forum (TTF) <https://bit.ly/2WgeNLb> indicated that international visitors to Australia are increasingly engaging in holistic nature-based tourism i.e., geotourism. This TTF report also highlighted the potential of 16 identified major landscapes developed by Tourism Australia and Parks Australia as the Australia’s National Landscapes Programme. Many of these landscapes offer the opportunity for particularly younger free and independent travellers (FITs), increasingly ‘digital natives,’ eager to undertake a geotourism experience obtained through adventurous self-drive tours.

These signature experiences are being targeted at niche audiences and offer the opportunity for the emergence of specific geological experiences such as the exposure of fossils, particularly high-profile species such as dinosaurs which are of course of specific interest to family groups, and specialised palaeontologists. If these signature experiences are developed within a geotourism framework, visitors of all ages will be able to enjoy and learn more about the holistic natural heritage (i.e., the landscape, the flora and fauna, as well as the cultural stories of the Country) within the ‘place’ in which these signature experiences are located.

In this regard, the THRIVE 2030 Visitor Economy Strategy (Action 7.5) recognises the value of emerging tourism trends such as geotourism in growing and developing high-quality products and experiences around unique Australian locations and themes, including approaches which integrate sustainable nature tourism with economic opportunities for Traditional Owners.

Dinosaur and other fossil attraction sites (including of course fossil/natural history museums) are now being developed right across Australia, with excitement emerging within a cluster in North-Western

(Riversleigh World Heritage Site) and several sites in Western Queensland (e.g. Eromanga Natural History Museum), Victoria (several locations), New South Wales (sites and museums), Western Australia, and not forgetting the Ediacaran assemblages which are highlighted in the Flinders Ranges World Heritage Area Nomination.

Many of these sites are, and can be further linked, within a network of geotrails, accessing the best digital technologies that can enhance the visitor experience, an aspiration of the THRIVE 2030 Visitor Economy Strategy Action 7.7 and complementing Goal 1 of the NGS.

Astrotourism and 'Sky Country'

in recent years, the concept and attraction of astrotourism has blossomed in many parts of outback Australia, particularly in WA, the NT, SA, and NSW (and emerging in Victoria) as many tourists flock to destinations which offer the opportunities to experience the 'Milky Way' with the benefit of crystal-clear skies. In many respects, astrotourism can be considered as one component of the holistic geotourism approach which is designed to 'maximise tourism benefits for a destination community, minimise negative impacts, and build a responsible tourism strategy that celebrates and builds on a sense of place.'

However, 'the place' which is subject of most astrotourism is the same 'Milky Way' viewed from different localities from East to West across Australia. Researchers have uncovered fascinating examples of Aboriginal 'star knowledge' relating to seasonal conditions, planting schedules, animal behaviour, songlines, and symbolically to features of landscape of the place in which Aboriginal people live. It could be argued that an Aboriginal perspective of the night sky could be of more value to fulfil the geotourism experience of the place being visited than a standard scientific view of the heavens, located many light years away. Clearly, tourism operators in Australia should engage with Aboriginal specialists to ensure that their perspective becomes a major feature of the astrotourism experience.

Country at the Centre – A New Approach?

Across Australia, the emerging GeoRegions approach is opening new pathways to recognise landscapes as living places where culture, story and deep time come together. At its heart is a simple but important shift: valuing land not only through science, but through the knowledge, responsibility, and continuing custodianship of Aboriginal and Torres Strait Islander peoples.

For First Nations communities, landforms are not just physical features. They are part of living cultural landscapes shaped by Ancestors, story, and ongoing relationships with Country. GeoRegions create space for these connections to be recognised alongside geological and ecological values, not added later, but embedded from the beginning.

The recognition of places such as Budj Bim Cultural Landscape and Murujuga Cultural Landscape shows what is possible when Indigenous leadership is at the centre. These are powerful examples of Traditional Owners working in partnership with communities and governments to protect and share places of global significance.

GeoRegions also offer practical opportunities for communities to shape their own futures. Through place-based, impact-positive geotourism and pathways to potential UNESCO Global Geoparks

recognition, they can support local employment, sustainable economic development and the passing on of knowledge between generations. Most importantly, they enable communities to tell their own stories, in their own voices, on their own terms. <https://bit.ly/4lX3aD6>

This reflects a broader understanding of ‘cultural geomorphology’ that landforms carry meaning, identity, and memory, as well as scientific value. It invites all of us to see landscapes not just as scenery, but as places of cultural responsibility <https://bit.ly/4r9jqCa>

GeoRegions are not just about conservation and geotourism, they are about strengthening relationships with Country, with culture, and with each other. And when Country is truly at the centre, better outcomes follow for everyone.

This concept is being presented and explored further by Geotourism Australia at the Destination Northern Australia Conference (DNAC26) to be held in Alice Springs, 5-7 August 2026 <https://northaust.org.au/>

Evolution of the National Geotourism Strategy (NGS)

The AGC has seen the articulation of a strategy with a staged and incremental approach as being essential to gain government endorsement at all levels. The NGS also acknowledged the need to protect the scientific and cultural sensitivity of some geoheritage and geosites, and to ensure protection from geotourism where appropriate. In 2020, the AGC set up a NGS Reference Group that included representatives of other key active stakeholders (e.g., the Geotourism Standing Committee of the GSA, The AusIMM, and the AIG), and under the guidance of this reference group, it was considered that other key stakeholder groups would be best placed to help deliver different parts of the NGS, which was launched in April 2021. <https://bit.ly/3yWex5u>

Seven key strategic goals are now being implemented by Theme Leaders under the direction of a formalised AGC Steering Committee.

1. DIGITAL TRANSFORMATION – the assessment and promotion of new digital technologies (e.g., delivered through smartphones and in visitor interpretation centers – 3D visualisation, AR & VR) as a cost-effective means of better accessing, communicating/interpreting content for travelers.

Theme Leader: Dr Mark Williams E: mark.williams@utas.edu.au

2. GEOREGIONS AND GEOPARKS – to define an approval pathway for major geotourism projects.

Theme Leader: Angus M Robinson E: angus@leisuresolutions.com.au

3. GEOTRAILS – to establish a framework for creating new geotrail development – local, regional, and national engagement to open dialogue with existing walking, biking, and rail trail interest groups and operators to highlight the availability of quality natural heritage information. Refer Working Group report dated 13 March 2024 <https://bit.ly/3J7s6FA>

Theme Leader Chair: David Robson, robodavidf@gmail.com

4. GEOHERITAGE – to establish national criteria for geoheritage listings suitable for geotourism.

Theme Leader: Ruby Hoyland, ruby.hoyland@utas.edu.au. Refer Working Group report dated 28 November 2023 <https://bit.ly/3NjMDco>

5. CULTURAL LANDSCAPES – to develop geotourism in regional mining communities with potential geoheritage and cultural heritage sites.

Theme Leader: Dr Melinda McHenry, melinda.mchenry@utas.edu.au

6. INTERNATIONAL ENGAGEMENT – to strengthen Australia’s international geoscience standing through geotourism excellence.

Theme Leader: Dr Young Ng, oz.geotourism@gmail.com

7. GEOCOMMUNICATION – to develop and enhance the geoscience interpretation and communication skills of everyone actively involved in the presentation of geosites, enabling the provision of accurate and thematic information in an accessible manner.

Theme Leader: Professor Pat James, patrick.james@adelaide.edu.au

A key outcome of **Goal One** has already been achieved. A digital platform prototype has been developed, known as the *Australian Geotourism Discovery Portal (AGDP)*. This platform serves as an information hub for various user personas, enabling them to discover and explore a wide range of attractions and destinations across Australia. The portal, utilising the University of Tasmania’s (UTas) ArcGIS Hub Solution platform, boasts a user-friendly interface and easy navigation. Users can explore the platform by state or GeoRegion, and each geosite, geotrail, mining site, or cultural site is accompanied by detailed descriptions, photos, and available amenities. This allows travellers to gain a sense of what to expect before their visit. The platform is accessible through desktop and mobile browsers, ensuring that travellers can plan their trips conveniently while on the go. Furthermore, the platform can potentially integrate with other travel tools, such as booking and transportation services, to offer a seamless travel experience. <https://lnkd.in/ga4deQar> The project is being developed through two phases.

Phase 1: Development of prototype and data ingestion workflow. Excellent progress has been made on this and for the last part of this phase, the data ingestion workflows have been completed.

Phase 2: Populating the portal with data. During this phase (currently underway), the platform will be made available to potential partner organisations and NGS stakeholders. Moving forward, the next steps involve aggregating data from diverse sources, including geological surveys, partner organisations, and public spatial repositories. This process poses a significant challenge and necessitates cooperation and support from multiple stakeholders and additional funding. A manuscript (with Dr Mark Williams as the lead author) for the AGDP platform has been submitted, approved and now published by a prominent Sustainability journal and can be viewed at <https://www.mdpi.com/2071-1050/16/13/5482>

Launched on 19th January 2024, the *Glen Innes Highlands Skywalk* represents a demonstration of how combining technology, infrastructure, innovation, and creativity creates an immersive sensory experience that drives not only economic benefits through increased visitation and longer stays but social and wellbeing benefits for the local community. The Skywalk, a boardwalk, provides visitors with spectacular views of the surrounding Glen Innes rural landscape and the township of Glen Innes. Overlooking the famous ‘Australian Standing Stones’ monument, it highlights both Celtic connections and Ngarabul Aboriginal culture.

The Skywalk is an exemplary world-class geotourism experience. The contracted production group (Naveze) has delivered 22 audio stories and 360-degree drone-captured footage with augmented reality integrated into a hyper-local mapping platform comprising three primary viewing points as well

as points of interest further afield using video footage. This footage, delivering the abiotic, biotic, and cultural stories, enables visitors to place themselves virtually at those points of interest. Access to this digital information is obtained by using a smartphone to capture a QR code located on each of the three interpretation signs which are erected at these viewing points (refer picture of viewing platform one).

In developing the National Geotourism Strategy for Australia, the AGC has recognised, through the implementation of Goal One, that geotourism maps, supplemented by publications, may well be eventually replaced by digital technologies (e.g., 3D visualisation, augmented reality, virtual reality, holograms, and live streaming using smartphones and drones) and GIS technologies as a cost-effective means of accessing and better communicating natural and cultural heritage content for tourists throughout regional Australia.

With significant funding provided by the Sydney Mineral Exploration Discussion Group (SMDEG), development of an App based virtual geotrail along the entire Northern Beaches coastline forming part of the Ku-ring-gai GeoRegion, with a linked website. A contractor, who has delivered Apps for the NSW Government's Geotours has been contracted to undertake this work.

Goal Two focuses on defining an approval pathway for major geotourism projects with three GeoRegion projects (Ku-ring-gai, Murchison, and Glen Innes Highlands) being included as project pilots.

Discussions between the AGC and the GWG have continued, particularly since the launch of the NGS, with the objective of determining the extent of government endorsement and engagement during its implementation process. The GWG has offered to help formulate a new National Geoparks Reference Committee, the composition of which will be determined by the relevant State/Territory Government in which any geopark nomination is being proposed) and that technical advice can also be sought from respective jurisdictions on geological and other matters where appropriate.

It was also significant to note that Geoscience Australia (the Australian Government geoscience agency) joined with the AGC in June 2021 in making submissions in support of geotourism to an Australian Government inquiry focusing on 'Reimagining the Visitor Economy. Moreover, the Geological Surveys of NSW, WA, and Tasmania have been proactive in encouraging the development of local and regional geotrail development. In South Australia, the geoscience community has worked closely with government agencies in developing a World Heritage Area nomination for the Flinders Ranges in recognition of outstanding geoheritage attributes.

The realisation of Goal Two of the NGS has now led to an agreed pathway for consideration of and approval of major geotourism projects by governments at all levels.

In addition, given the findings of the recent Inquiry by the Joint Standing Committee on Foreign Affairs, Defence and Trade as it relates to the development of indigenous cultural tourism within regional and outback areas of Australia, there is an opportunity to encourage Australian Governments to make use of the UNESCO Global Geopark program to address socio-economic disadvantage in regions populated by either indigenous or non-indigenous populations where there is limited alternative economic activity, particularly as described for further activity within Goal 5.

Goal 3: Establish a framework for creating high quality, sustainable geotrails. A framework has been finalised with guidelines established and published for geotrail establishment. The working group is

currently providing data input to the AGDP where already some 55 geotrails across Australia have been identified.

However, despite the inherent difficulties in gaining interest in or collaboration with indigenous tourism operators, it is recognised that the working group may have a future role in working with the GSA (through the auspices of its Geotourism Standing Committee and its Geoscience Indigenous Collaboration and Engagement Specialist Group) in providing assistance to the development of any First Nations people projects related to the establishment of geotrails (focused conceivably on designated songlines).

Given the current level of collaboration with the Australian Geocache community, the working group can provide guidance to this community for customised geotrail development.

Goal 4: Establish national criteria for geoheritage listings suitable for geotourism. The achievement so far has been the publication of a document that defines geoheritage sites that are suitable for geotourism. The working group is currently providing data input (and specialist advisings) to the AGDP, which can be expected to be an ongoing function as the AGDP project develops. There now exists an opportunity for the Working Group to develop a new goal which might include developing a national approach to geoheritage management, given its intrinsic linkage with geotourism.

On 31 March 2026, Geotourism Australia submitted two detailed position papers relating to a review of the Queensland Heritage Act 1992.

- Recommending that the Queensland Government strengthens recognition and protection of geoheritage within the Queensland heritage framework. <https://bit.ly/4mdyog2>
- Recommending principally for the provision of recognition of districts such as GeoRegions as a new heritage category; enabling landscape-scale registration on the Heritage Register; expanding cultural heritage criteria to include geological, industrial, and intangible values; and integrating heritage with mine rehabilitation and post-mining planning. <https://bit.ly/4tqiQSa>

Goal Five focuses on developing geotourism in regional mining communities with potential geoheritage and cultural heritage sites, where surfaces are exposed by mining, and their recreational, educational, and cultural values can be realised. Goal Five also aims to draw attention to these places, and to the range of activities that could be conducted in these places. It is understood that the acknowledgement of Aboriginal cultural heritage beyond the benefits offered through geotourism includes the need to ensure it is appropriately protected. This will ensure the preservation of Aboriginal cultural heritage is equally as important as that of mining and other aspects of cultural landscapes, thus leading to improving the public perception of mining professionals and the industries in which they work. One of the Goal Five projects has been input into the Victorian Goldfields World Heritage Bid (involving 15 Victorian Councils) to be positioned as a National Geotourism Strategy supported initiative, and in return for geotourism to be recognised as a key driver for regional development across the heritage mining sites of Central and NE Victoria.

In addition, a commitment to engagement in the Goldfields Environmental Management Conference in Kalgoorlie has been initiated in May 2025 with the support of the Kalgoorlie Branch of The AusIMM. With the assistance of AusIMM member, Colin Randall based in Cloncurry, Geotourism Australia continues to support geotourism development initiatives in the Mt Isa/Mary Kathleen/Cloncurry area

of NW Queensland through the auspices of the MITEZ (Mount Isa to Townsville Economic Development Zone Inc) organisation.

To further broader mining community understanding of the intent of Goal 5, geotourism concepts have been explained at conferences of the Australasian Mining History Association held at Atherton, Far North Qld in 2019 and at Burra, South Australia in 2022. <https://bit.ly/3SuZ0Cy> The development of geotourism is now also listed as a ‘way forward’ for communities facing mine closure in the Mine Closure Hub of the Sustainable Minerals Institute of the University of Qld <https://bit.ly/3dEP9eS> and through an established working relationship firstly with the former company, EnviroMETS Qld (eMQ) and more recently with the CRC TiME <https://crctime.com.au/>

The concept of transformative post-mining land use (PMLU) offers the opportunity to unlock new value from mining-impacted land through innovative, sustainable post-mining land uses that benefit future custodians and local communities. Alignment of transformative post mining land use approaches to circular economy principles is currently being explored and the unique challenges and opportunities in the Australian context reviewed. These include the development of geotourism and heritage conservation, the high opportunity for renewable energy projects on disturbed land, and the opportunity to align with regional planning for economic transitions.

Already best-practice examples of innovative post mining land uses, such as can be seen at the clean energy hub at Kidston, Queensland and in the Collie-Bunbury region - one of Western Australia’s most diverse economies embracing mining, mineral processing, manufacturing, primary industries, and geotourism.

The 2025 release of the Australian Government’s Productivity Commission Interim Report entitled ‘Australia’s Circular Economy: Unlocking the opportunities’ recognises that the approach of thinking about the problem of transformative PMLU as being best practice.

Research to date to which Geotourism Australia has contributed, emphasises the need for reforms to unlock value from legacy mine infrastructure located in mining cultural landscapes and which support regional economic transitions. These areas are those where the historical and cultural aspects of mining activities have left a lasting imprint on the environment and the resident communities. Mining cultural landscapes can include a variety of elements that attest to the impact of mining on both the physical environment and its cultural heritage; conserving them is crucial for understanding the historical development of regions shaped by mining activities. Developing geotourism in regional mining communities with potential geoheritage and cultural heritage sites is one of the key goals of Geotourism Australia.

The Productivity Commission’s report refer <https://bit.ly/4cnCR4f> is positioned as foundational to outcomes in mining cultural landscapes. An extract of the findings as it relates to mining can also be sighted at <https://bit.ly/3E7iSu8>

In formulating a national strategy for geotourism development, the AGC has consulted with both the Social and Environment Society and the AusIMM Heritage Committee to determine how best the development of geotourism throughout Australia can enhance the scope of regional development of mining areas during current mining activities and after mine closure. Geotourism adds considerable holistic content value to traditional nature-based tourism as well as cultural tourism (both indigenous and post European settlement having regard to mining aspects). The AGC has identified three broad topics of interest which will form the basis of incorporation into the National Geotourism Strategy.

1. Consequences of mine closure, most of it currently oriented to environmental remediation (make safe, stable and non-polluting), noting the need to increase the scope to include the preservation of mining heritage in situ (e.g. gossans and other examples of economic geological significance) built (e.g. buildings, workings and equipment), and non-built (e.g. mining and personnel records), all of which are of long standing interest to the AusIMM Heritage Committee.
2. The identification within the AusIMM of cultural heritage management professionals who are in the 'front line' of social performance in developing and managing geotourism activities.
3. The positioning within the AusIMM of ESG imperatives; the latter because of evolving project financing and regulatory requirements coupled with meeting community expectations. Moreover, mining heritage is a strategic asset in navigating Australia's evolving ESG landscape. For AusIMM members, integrating heritage into professional practice strengthens credibility, supports social licence, and demonstrates leadership in responsible resource development.

The acknowledgement of Aboriginal cultural heritage beyond the benefits offered through geotourism includes the need to ensure it is appropriately protected. This will ensure that the preservation of Aboriginal cultural heritage is as important as that of mining and other aspects of cultural landscapes, thus leading to improving the public perception of mining professionals and the industries in which they work.

In October 2014, a webinar presentation <https://bit.ly/3BCPREV> to members of The AusIMM referred to the work of then eMQ <https://enviromets.net.au/our-people> and to some of the fascinating mining cultural landscapes described in the recently published book, "102 Things to Do With a Hole in the Ground". In June 2025, Geotourism Australia introduced this concept of PMLU planning to Singleton Shire Council, a LGA which manages many open cut coal mines in the Hunter Valley of NSW <https://bit.ly/4aw2CRe>

However, given the increasing level of interest in both mining industry engagement and Aboriginal cultural landscapes which offer tourism development opportunities (and embracing areas identified for exploration and existing mine sites), the case could be made to develop the two connected themes for future activity. This might be realised as a practical response to the 'Closing the Gap' political imperative for highly disadvantaged communities in the NT and Western Australia who reside within high profile national landscapes with outstanding geoheritage attributes, and which have not already been identified as being prospective for exploration and mining.

Geotourism Australia has made several inquiries through a range of channels aimed at stimulating interest in exploring geopark opportunities for First Nations peoples. Contact continues to be made with the Murujuga Aboriginal Corporation, owners of the recently listed Murujuga World Heritage site in the Pilbara region of WA.

Further supportive conversations have been held with Dr Alan Dale who has helped build integrated societal governance systems across the tropical world and northern Australia, and with his support he coordinated a meeting recently for Geotourism Australia with Barry Hunter, CEO of the North Australian Indigenous Land and Sea Management Alliance. support Indigenous Leadership, Story, and Sustainable Futures.'

Geotourism Australia has undertaken further consultations with Qld Parks and Wildlife Service in regard to developing a selection of say six geotours using a technology platform within National Parks

across Qld involving a consortium which might include the Service park managements, the Qld Geological Survey, Geotourism Australia (involving also the Geological Society of Australia), and at the local level for each location, the appropriate First Nations People representatives. Discussions with the Chillagoe/Mungana Cave National Park/ Chillagoe Geology Hub could be the first project to be considered. A project in Lamington National Park might also be in the offering, but not likely until next year.

Goal 6: Strengthen Australia's international geoscience standing through geotourism excellence. The delivery of the GEOFEST 2024 Sydney Workshop in July 2024 represents a major achievement to date.

Theme Leader Dr Young Ng is of the view that Geotourism Australia continues to strengthen its international presence through active participation in major global conferences, strategic partnerships with international organisations, and targeted initiatives in geoethics, geoconservation, and geotourism education. The upcoming program of events in 2026 provides significant opportunities to expand Australia's leadership role in the Asia-Pacific region and to deepen collaboration with global networks in geotourism, geoparks, and geoheritage.

A recent activity included a **Webinar on Geoethics** on 25 May 2026 organised by Geotourism Australia together with the Indonesian Geoparks Network, and supported by the Chinese Geoparks Network, the International Association for Promoting Geoethics (IAPG), ProGEO, and the TARN Research Team of the University of Tasmania. The session focused on the role of geoethics in geotourism and geopark development, with Dr Silvia Peppoloni delivering the keynote presentation. She outlined the ethical principles guiding responsible geoscience and sustainable tourism, emphasising ecological humanism, global citizenship, responsibility, respect for natural heritage, and inclusive decision making. Her talk highlighted how geoparks and geotourism can foster environmental awareness while balancing conservation with economic development.

The presentation is available for shared learning: <https://www.leisuresolutions.com.au/wp-content/uploads/2026/05/Silvias-presentation-20260525.pdf>

The presentation has been widely promoted through LinkedIn and the Facebook 'Global Geoparks' group.

Goal 7: Continue to develop and enhance the geoscience interpretation and communication skills of everyone actively involved in the presentation of geosites, enabling the provision of accurate and thematic information in an accessible manner by completing the production of a communications media channel, which might be better accommodated as an online product or even linked to the AGDP.

Geotourism Resources

Further information about geotourism can be obtained Geotourism Australia Resource Centre <https://bit.ly/2uYaaGQ>

Appendix B

Geotrails

A geotrail can deliver geotourism experiences anywhere through a journey linked by an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment.

In New South Wales, the Ku-ring-gai GeoRegion geotrails in the northern suburbs of Sydney are being developed in a working partnership with the NSW National Parks and Wildlife Service and three local government agencies of Hornsby, Ku-ring-gai, and Northern Beaches.

Queensland's 'Dig The Tropic' <https://bit.ly/3Sv5AZM> is an operating example of a formative geotrail. Dig The Tropic is a themed journey linking the wonders of the Southern Great Barrier Reef with the mysteries of Queensland's Outback. Following the Tropic of Capricorn, visitors can experience a living museum created by ancient events left behind, visiting sites such as the Stone House Museum, Age of Dinosaurs Museum, Lark Quarry, the Sapphire Gemfields, Capricorn Caves, and the Great Barrier Reef.

Active geotrails proposals are continuing to be being implemented or considered by various government agencies and/or university groups in Western Australia (Murchison GeoRegion <https://bit.ly/3fejlbA>, and John Forrest National Park Railway Reserve Heritage <https://bit.ly/4jqrTgR> and Meckering Geotrails), Tasmania (as already identified), Queensland (Brisbane Valley Rail Trail <https://bit.ly/4r9j52m> Dig the Tropics, Boulder Opal), New South Wales <https://nswgeotours.stqry.app/> particularly Port Macquarie Coastal Geotrail, the Newcastle Coastal Geotrail, Warrumbungle National Park Geotrails Central Darling River, the Mutawintji National Park Geotrail <https://bit.ly/3V6IEop> and proposals for 'Wonder of Gondwana' geotrails across the Outback/Central West region – all under development), South Australia (various projects including the Brachina Gorge Geotrail and proposals for new geotrails in the Goyder/Burra region), and Victoria (Kanawinka/Great Ocean Road area).

In the Northern Territory, there two well defined trans-continental 'road adventures' exist as self-drive geotours. These are the Explorers Way extending from Port Augusta to Darwin, and the Savannah Way which passes East-West from Cairns to Broome through the Gulf Country, Katherine Region, Victoria River District, and Kimberley. In addition, the Red Centre Way (formative Red Centre Geotrail) is under proposed reconstruction with government funding. A fourth major geotrail is the unsealed, 'Gold Rush Way' linking the historic Arltunga and Halls Creek (WA) gold fields via the Tamani region – a known and active gold producing area. A local geotrail has recently been completed in Darwin and a geotrail is currently being developed at Pine Creek.

The world-famous Larapinta Trail, which straddles the strike length of the formations and intrusions forming the ridges of the magnificent Central Ranges landscapes has been effectively upgraded as a geotrail with the publication in 2023 of a geological field guide authored by Dr Anett Weisheit. This publication also includes reference to the extensive flora and fauna and Aboriginal cultural attributes, which when combined with the more recent history of the Telegraph Station (marking the original site of the first non-Aboriginal settlement in Alice Springs) all add to a holistic understanding of this place, the country of the Western and Central Arrernte people. This work was published and part-funded by the NT Division of the GSA, matched by generous sponsorship from the AGC and Leisure Solutions® with support from commercial organisations, not-for-profit clubs, and private donors. <https://bit.ly/3BYnAZO>

The Standley Chasm - Angkerle Atwatye geotrail project was undertaken in 2023/2024 by the Geological Society of Australia (GSA) and Leisure Solutions® in collaboration with the Standley Chasm

Angkerle Atwatye tour guides, as well as the professional input of geoscientist contributors including Dr Anett Weisheit, Ian D Lewis, and Ken Moule. The project involved an upgrade of the existing walking trail at this key location of the Tjoritja West MacDonnell National Park to the status of a geotrail (length of 1.2 km) through the production of an interpretive brochure. <https://bit.ly/4safm6b>

In recognition of the NT Aboriginal Tourism Strategy 2020-2030, which seeks to strengthen and highlight the Northern Territory's distinctive Aboriginal cultural tourism experience, the project features a multi-disciplinary collaboration which will contribute to developing the skills and knowledge of the Aboriginal tour guides at Standley Chasm - Angkerle Atwatye. In support of the Alice Springs and MacDonnell Ranges 2020 Destination Management Plan, this project will also serve as a highly useful geotourism pilot in supporting by way of demonstration, the upgrade of cultural and heritage experiences in other key locations along the West MacDonnell Ranges e.g., Simpsons Gap, Ellery Creek, Ormiston Gorge, Redbank Gorge and Glen Helen Gorge and providing a linkage to the world-famous Larapinta Trail.

With this aspiration in place, Leisure Solutions® has recently been successful in being awarded an Austrade grant to develop geotrail brochure supported projects at two sites along the West and East MacDonnell Ranges (Ormiston and Trephina Gorges respectively; the latter incorporating the Arltunga historical mining reserve) using the Standley Chasm project as a model. The grant (inclusive of a financial contribution by Leisure Solutions®) covers all the design and printing costs for some 40,000 brochures. The content development work will be undertaken by Dr Anett Weisheit, with both Geotourism Australia members undertaking this work on a 'pro bono' basis. Tourism Central Australia is providing partnership support by distributing the brochures to tour operators visiting these attractions. It is believed that this project would serve to raise awareness of geotourism amongst NT tour operators.

There are also a wide range of smaller, dedicated journeys along walking tracks, old rail easements etc., which are deemed suitable for development as geotrails in NSW, Tasmania, Qld, WA, Victoria, and SA. <https://bit.ly/3SaHFiU>

NSW's 'Modern Mining Trail' concept <https://bit.ly/3linPgn> represents another formative geotrail example. This is a unique opportunity to travel through Central NSW on the Modern Mining Trail and explore Australia's mining – past, present, and future. The Modern Mining Trail incorporates Parkes, Blayney, Orange, and Cobar regions through their Visitor Centres, featuring the following modern mines: Northparkes Mines, Newcrest's Cadia Valley Operations, Peak Gold Mine (Cobar), Peak Hill Open Cut Experience, Evolution Mining at Cowal, and Great Cobar Copper Mine. The Modern Mining Trail region is also home to several tourism experiences that have linkages to the history of mining and the role that modern mining plays in communities today. Attractions include the Henry Parkes Centre, the CSIRO Parkes Radio Telescope, Peak Hill Open Cut Gallery and the Big Fish Fossil Hut, Age of Fishes Museum, Canowindra, the Golden Memories Museum in Millthorpe, West Wyalong's Barmedman Mineral Pool, West Wyalong Heritage Museum and the Bland Shire Heritage and Gold Tour, the Great Cobar Heritage Centre and associated Miner's Heritage Park and Heritage Walk.

At Bulga in the NSW Hunter Valley, Glencore has established the *Minimbah Teaching Place* facility for people to learn and celebrate local Aboriginal people. To supplement this facility, the company supported by Singleton Council plans to develop a discovery trail between the villages of Bulga and Broke.

Goal Three of the National Geotourism Strategy aims to establish a framework for creating high quality, sustainable geotrails within Australia with an 'Inventory of Geotrails for Australia'

<https://bit.ly/3DJllby> documenting a considerable listing of projects. These geotrail projects comprise various geosites/geotourism sites being connected into a journey linking geology and landscape destinations. They are being designed to have universal appeal with safe access, are easy to establish and represent a very cost-effective means of enhancing regional development. Working Group Three has released a set of guidelines for sustainable geotrail development <https://bit.ly/3J7s6FA>

Appendix C

GeoRegions and Geoparks

In Australia, a 'GeoRegion' can be considered a defined area of natural and cultural heritage which highlights outstanding geoheritage features within which geotrail and geopark projects can be developed for approval by governments.

On the world stage 'UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education, and sustainable development. Their bottom-up approach of combining conservation with sustainable development while involving local communities is becoming increasingly popular.'

Geoparks have been established to create enhanced opportunities for the people who live within their boundaries and foster economic benefits for them, usually through the development of sustainable tourism. Geoparks stimulate economic activity and sustainable development through geotourism (holistic, nature-based, and cultural tourism that focuses on an area's geology and landscape as the platform for providing visitor engagement, learning and enjoyment). By attracting an increasing number of visitors, a geopark fosters local socio-economic development through the promotion of a quality label linked with the local natural and cultural heritage. It encourages the creation of local, innovative enterprises and cottage industries involved in geotourism and geologically inspired products.

Geoparks also focus on community engagement and ownership. In Australia, national parks focus only on biodiversity and often with insufficient attention given to geological heritage. Geoparks are both a regional development concept as well as a branding tool. They achieve these goals through conservation, education and geotourism. Unlike World Heritage Areas and national parks, geoparks can comprise both protected and non-protected areas and enable and celebrate sustainable development.

Geoparks seek to conserve significant geological features and explore and demonstrate methods for excellence in conservation and geoscientific knowledge. This is accomplished through protected and interpreted geosites, museums, information centres, trails, mine sites, guided tours, school class excursions, popular literature, maps, educational materials and displays, and seminars. Geoparks are capable of being community driven. The geopark concept is an iconic one, applicable across all continents.

The establishment of geoparks should be based on a strong concept, political will with financial long-term support, and professional management structures. Hence, it is essential that, prior to the creation of a geopark, there should be comprehensive and exhaustive discussions with the community, researchers, and government agents to search for a common impetus. Geoparks can bring a new combination of social, economic, and environmental information to the political table. Geoparks cannot be simply traditionally protected nature areas for teaching and appreciating their geological components with just sustainable development in mind. The geopark's mission is to be something new and different.

Whilst UNESCO Global Geopark must demonstrate geological heritage of international significance, the purpose of a geopark (at all levels including national and local) is to explore, develop and celebrate the links between that geological heritage and all other aspects of the area's natural, cultural, and intangible heritages. A geopark uses its geological heritage, in connection with all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using our earth's resources sustainably, mitigating the effects of climate change and reducing natural disasters and related risks. Geoparks give local people a sense of pride in their region and strengthen their identification with the area.

'State' based National Geoparks

As an option, State/Territory governments are already empowered to approve the designation of identified areas as 'National' Geoparks under their existing statutory framework, because the proposed creation of a 'National' Geopark does not require any protective measures other than those already in existence to provide for both protected and unprotected areas, as appropriate. Moreover, the recently approved Geopark Assessment Process provides for the assessment of any National Geopark proposal that emerges from within an approved GeoRegion. As would apply for any proposed UNESCO Global Park, any designated 'National' Geopark would need to be managed by an incorporated entity (local or state government created, community trust, association established under state government legislation etc.)

Integrating Western Australian 'Local Geoparks'

Prior to the establishment of the national framework, several Western Australian initiatives, supported by the Australian Geoparks Network (AGN) and GeoparksWA, developed as community-based 'Local Geoparks'. Local Geoparks are defined and assessed by GeoparksWA to meet many of the UNESCO guidelines for development as geoparks that have significant abiotic, biotic and cultural features, and have a legally incorporated community-based organisation with a locally based management board that aspires towards becoming a UNESCO Global Geopark.

UNESCO Global Geopark Concept

As previously described, geoparks can choose to evolve through a series of levels from aspiring, national, state, regional (e.g., European or Asia-Pacific Regions) to 'global.' There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau which currently represents 241 members from 51 countries. The original target of the Global Geoparks Network was to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year.

In China, there are three levels of geoparks: provincial, national, and global geoparks. They are all managed by local county or municipal governments under the direct supervision of the Ministry of Land and Resources. Currently, there are over 320 provincial geoparks (originally labelled as 'scenic areas') in China, among which 200 have already gained national status. With 51 of these now designated as global geoparks (including Hong Kong Geopark) having acquired this status, China manages by far the largest number of global geoparks in the world.

UNESCO member countries are entitled to nominate a maximum of two applications per year. Under the UNESCO Global Geopark operational guidelines, these applications must be made through the official channel of the UNESCO representative in the member country. The New Zealand National

Commission for UNESCO has already announced the establishment of a UNESCO Global Geoparks programme in New Zealand and has appointed a Geoparks Expert Advisory Panel to encourage and support New Zealand nominations for UNESCO Global Geopark status. One Aspiring UNESCO Global Geopark nomination (Waitaki Whitestone) has been formally evaluated and approved by the UNESCO Global Geopark Council in 2023.

The Indonesian Geoparks Network (IGN) currently embraces a total of 12 UNESCO Global Geoparks as well as 12 national and local geoparks as its members. These geoparks and their affiliations are active in promoting, developing, and upgrading their current tourism, local products, park and environmental management, infrastructure, and facilities. The attractiveness of these geoparks lies in their geology, landscapes, and unique cultures.

The Global Geopark brand is a voluntary, quality label and while it is not a legislative designation, the key heritage sites within a geopark should be protected under local, regional, or national legislation as appropriate. UNESCO offers support to Global Geoparks on an ad-hoc basis via requests from Member States. Geopark status at any level, including 'global' does not imply restrictions on any economic activity inside a geopark where that activity complies with local, regional, or national legislation. The focus of geoparks is on promotion and appreciation of geological heritage, geology, and landscapes. These earth heritage sites are part of an integrated concept of protection, education, and sustainable development.

Whilst World Heritage Areas are created in perpetuity, the status of global geoparks is reviewed and renewed by UNESCO every four years. Even if an area has outstanding, world-famous geological heritage of outstanding universal value, UNESCO has determined that it cannot be a UNESCO Global Geopark unless the area also has a plan for the sustainable development of the people who live within it. To succeed, a UNESCO Global Geopark nomination, lodged by an appropriately incorporated management body, must have the support of local communities. Prior to a nomination being lodged, evidence must be demonstrated of geotourism activities being undertaken by a management authority (e.g., a national park agency) over a period of at least 12 months to establish credibility as a 'defacto geopark'.

There are six Global Geoparks in Europe that are geoparks specifically because of their mining history, and that mining continues in some of these territories. For example, in the Marble Arch Caves Global Geopark (Ireland), there are many quarries – dolomite, limestone, cement factory, and there is active exploration for shale gas, which would need to be extracted by fracking technologies. All these operations are undertaken in compliance with Irish legislation from both jurisdictions in the country. In Gea Norvegica Global Geopark (Norway) are located large larvakite quarries which export polished ornamental stone all over the world. In Magma Global Geopark (Norway) one of their partners is Titania A/S which operates as a mining company extracting ilmenite in Norway for the European titanium pigment industry.

The Muskauer Faltenbogen / Łuk Mużakowa UNESCO Global Geopark comprises parts of the German Federal States of Brandenburg and Saxony as well as of the Polish Lubuskie Province. It has about 80,000 inhabitants living in three rural districts with 19 provincial towns and municipalities. The entire area of the Muskauer Faltenbogen / Łuk Mużakowa UNESCO Global Geopark, located across Germany and Poland, is geared to combine the principles of ecology, economy, and social interests. The principle of conservation of nature, cultural areas and of the post-mining landscape go hand in hand with the development of tourism and not only helped locals to enhance their identification with their region but also contributed to economic development. The selling points of the UNESCO Global Geopark are three-fold one of which celebrates the post-mining and cultural landscape inherited from

130 years of resource-based mining development between 1840 and 1970, inclusive of the Lusatia region in East Germany, an open cut lignite coalmining area under transformation. The Latrobe Valley coal mining region in Gippsland Victoria faces similar challenges, but at a much earlier stage of post mine-site development. These are the basis for a comprehensive educational concept which reaches from natural to human-induced climate change, use of raw material and later 're-naturalisation' of historical and recent mining districts.

In summary, a geopark achieves its goals through conservation, education, and tourism. It seeks to conserve significant geological features and explore and demonstrate methods for excellence in conservation and geoscientific knowledge. This is accomplished through protected and interpreted geosites, museums, information centres, trails, mine sites, guided tours, school class excursions, popular literature, maps, educational materials and displays, and seminars. Geoparks are capable of being community driven. Geoparks stimulate economic activity and sustainable development through geotourism. By attracting increasing numbers of visitors, a geopark fosters local socio-economic development through the promotion of a quality brand linked with the local natural heritage. It encourages the creation of local enterprises and cottage industries involved in geotourism and geoproducts. The geopark concept is an iconic one, applicable across all continents.

An application area for a UNESCO Global Geopark has no stipulated size, but its geographical boundaries must clearly embrace a contained area of land (both protected and non-protected); with private landowners having the option of not allowing geopark activities on their land, should they choose not to participate. An application area can be as large as the boundaries of a local government area.

UNESCO approves a global geopark for an initial four-year period, at the end of which it is reassessed for revalidation purposes to establish that it has complied with all agreed requirements and the [UNESCO Global Geopark Code of Ethics](#)

The nomination procedure for UNESCO Global Geoparks requires the completion of a self-assessment document, <https://bit.ly/4fD6z6H> and the completion of a comprehensive application dossier. <https://bit.ly/3sexUpd>

Aspiring Geoparks

To qualify to be nominated as an **Aspiring** UNESCO Global Geopark, proponents must meet the requirements set out in the following Checklist <https://bit.ly/3z0JTMV> It should be noted that this Checklist and its Explanatory Note are not statutory documents; they are designed as a quick and easy dashboard to measure the preparedness to apply and to establish qualification as an 'Aspiring Geopark' designation. They do not replace the application file and Form A (Self-evaluation Form).

Agreed Key Considerations for UNESCO Global Geopark Development in Australia

It is now understood that the following considerations are essential requirements that need to be met to achieve government support for an Aspiring UNESCO Global Geopark nomination following the establishment of an approved GeoRegion according to guidelines detailed in **Appendix D**.

- Assessment and input into the further development of established GeoRegions are the responsibility of individual States / Territories, as legislation and tenure arrangements for land access are quite different in each jurisdiction. Any group wishing to establish a geopark from within an established GeoRegion will need to make representations to the designated

State/Territory government agencies to determine how a proposal can be assessed, and the types of works to be undertaken within a GeoRegion before it can be processed for approval.

- A prominent level of community (including other land-users, particularly with Aboriginal communities) engagement and 'ownership' is essential to meet UNESCO requirements.
- The key driver of geopark development must be focused on regional development – i.e., jobs and growth and demonstrate economic benefit to offset perceived political risk.
- The approval of State/Territory Government Geological Surveys for individual projects is an absolute necessity.
- Australian Government consideration of any UNESCO nomination emerging within an approved GeoRegion may well take place if state/territory government endorsement and funding is clearly established, but it cannot be assumed that any geopark assessment by the Australian Government would be commenced.

Members of two geopark advocacy groups (the Australian Geoparks Network and GeoparksWA) have been provided with the opportunity to participate in the NGS working groups, but their views about geopark development in Australia are neither supported by the AGC nor by Australian government geoscience agencies. Nevertheless, the members of these groups would be well advised to study the notice that has been recently placed on the website of the Geological Survey of WA that recommends the establishment of GeoRegions as a first step in advancing any geopark proposals.

<https://www.wa.gov.au/organisation/departments-of-mines-petroleum-and-exploration/geological-survey-of-western-australia/geotourism-and-geoheritage>

Pilot GeoRegion Projects

The AGC considers that three major geotourism projects, the Ku-ring-gai, Murchison, and Glen Innes Highlands GeoRegions represent ideal pilot studies from which a national set of administrative procedures for geoparks and regional geotrails have now developed.

Ku-ring-gai GeoRegion, Sydney, New South Wales

www.kuringgaigeoregion.au

The Friends of Ku-ring-gai Environment Inc (FOKE), a community organisation, has initiated a project with the objective of making a positive contribution to conservation based in and around Ku-ring-gai Chase National Park, located on the northern outskirts of Sydney (and within the area forming part of the former Sydney Harbour National Landscape), by seeking recognition of the very significant natural and cultural heritage values as exemplified by a wide range of geosites and six formative geotrails which can be highlighted within this GeoRegion. The future branding of this GeoRegion as an Aspiring UNESCO Global Geopark is also a future possibility.

Having conferred with a range of specialists on the geology, geomorphology, and related natural and cultural heritage values of Ku-ring-Gai Chase National Park, it was decided to investigate further particularly the special geoheritage values which exist in the proximity to the Ku-ring-gai Chase National Park area extending to include the Northern Beaches <https://bit.ly/3Lixasb>. These geoheritage values (both geomorphological and geological) form the platform for the development of the other natural heritage attributes as well as demonstrating the close relationship between landscape and human activity over many thousands of years.

The Geological Survey of New South Wales has advised that, while concerned that appropriate steps will need to be taken by three Councils and the NSW National Parks and Wildlife Service to ensure that visitor impacts are responsibly managed, the Survey has no objection to any proposal to develop this GeoRegion embracing some 440 sq kms in area as an Aspiring UNESCO Global Geopark. A comprehensive account of 'The Natural and Cultural History of the Ku-ring-gai GeoRegion' has been published by the Linnean Society of NSW <https://bit.ly/449IZcN>

The Ku-ring-gai GeoRegion is being developed to advance geoscience schools education activities through a range of measures.

The operations of the Ku-ring-gai Chase National Park are governed by a Management Plan (updated in 2024) which, as a very high priority, specifically provides for improved visitor facilities and park interpretation, also including the Kalkari Discovery precinct comprising a visitor centre used extensively by both day visitors and visiting school groups as well as a linked interpretation trail.

The National Parks and Wildlife Service (NPWS) has a commitment to investing resources in upgrading the interpretation elements, and as part of their commitment to the vision of the GeoRegion, there has been an agreement reached to incorporate geoscience elements (including rock specimens sourced from the GeoRegion) within both displays in the building and as part of the upgrading of the trail. This proposal has been warmly welcomed by the NSW Education Department managed Gibberagong Environmental Education Centre (Bobbin Head area) <https://bit.ly/43r8ORk> with which the KGR Steering Committee is establishing geoscience related programs linked to its KGR geotrails.

With substantial funding provided by the NSW Division of the Australian Institute of Geoscientists (AIG), the Ku-ring-gai GeoRegion is developing a geoscience interpretative display within the Kalkari Discovery Centre. It is proposed that rock units in the KGR would be assembled on a structure/display outside the main building to explain the range of rock types outcropping throughout the KGR. In addition, interpretive signage highlighting abiotic content (geology etc.,) will complete this display. NPWS has agreed that acknowledgement of substantial sponsorship by the NSW Branch of the AIG would be acknowledged by signage within the building. The sponsorship will be channeled through the Foundation of National Parks and Wildlife (FNPW) <https://fnpw.org.au/about-us/> also acknowledged by FNPW as a sponsorship. Worth noting that FNPW has recently committed a grant of \$30,000 to redevelop an additional geotrail at West Head in a collaboration with the GSNSW as part of their Geotour series <https://nswgeotours.stqry.app/>

In return for the proposed sponsorship, AIG would receive extensive publicity and geoscience awareness generated through social media outlets, local media and community group outlets on the Northern Beaches and Upper North Shore areas. Given that the KGR Steering Committee has recently introduced the AIG-supported Teacher Earth Science Education (TESEP) program to the Gibberagong Centre, it is believed that an upgraded Kalkari Discovery Centre will also benefit the TESEP participants.

SMEDG has now formally approved the payment arrangements of \$15k for the implementation of the Northern Beaches Virtual Geotrail. The objective of the project is to enable the FOKE GeoRegion project team to develop a Virtual Coastal Geotrail from North Head to Barrenjoey highlighting the geologically significant attributes of the coast aimed at providing both an educational and informative resource for exploring the geology of this coastal section of the GeoRegion. The approach uses the GeoRegion website, www.kuringgaigeoregion.au as its foundation, providing four Geotrails in a user-friendly format that is downloadable (PDF) or accessible via a smart phone. The four Geotrails are: North Head, Long Reef, Narrabeen to Mona Vale, and Bungan to Barrenjoey.

Murchison GeoRegion Project, Western Australia

Inspired by participation in a SEGRA 2014 conference, Western Australia's Mid-West Development Commission (MWDC) conferred with seven Councils to establish WA's first major geotourism development focused on what is now described as the Murchison GeoRegion to be built on a geotrail model, located some 550 kms north of Perth. <https://bit.ly/3fejlba>

The MWDC believed at the time that the ancient Murchison geology provided the ideal platform for unique, nature-based tourism experiences of global significance, particularly to the 'experience seeker/dedicated discoverer' market. The Mid West Tourism Development Strategy (2014) concluded that the region's iconic nature-based tourist attractions were not developed to their potential and that its visitor appeal was not fully realised. The Strategy identified geotourism in the Murchison sub region as a potential 'game changing' tourism initiative, with capacity to help the region realise its potential as a major tourism destination, with the potential of being nominated as an Aspiring UNESCO Global Geopark. This strategy is now being implemented by a Board of Management representing the seven participating Councils.

During 2025, the MWDC has now assumed the role as the designated State Government agency for the oversight of any geopark assessment work as detailed in the Geopark Assessment Process.

Geotourism Australia has recently provided detailed commentary to the MWDC as it relates to a Digital Economy Strategy and its relevance to the Murchison GeoRegion. This advice has also been shared with other regional development agencies, refer <https://bit.ly/48GgUxp>

Glen Innes Highlands GeoRegion, New South Wales

Within the framework of the National Geotourism Strategy (NGS) and as a significant first for Australia, the Glen Innes Severn Council (in the New England Region of Northern NSW) has recently approved an upgraded and comprehensive Tourism Destination Management Plan that has embraced 'geotourism as a holistic approach to featuring natural and cultural heritage into the relevant customer experiences.' The Plan also proposes the development of various trails including a rail trail, all with potential development as geotrails. The Council is supporting the designation of a GeoRegion, and with the medium-term potential of this GeoRegion being considered as a potential Aspiring UNESCO Global Geopark nomination, given the diversity of the Region's substantive cultural attributes including its rich mining heritage. <https://lnkd.in/e2HUYcAE>

THRIVE 2030 Visitor Economy Strategy and GeoRegions

The AGC has welcomed the recent release of the THRIVE 2030 Visitor Economy Strategy. This strategy sets out to assist the tourism industry and governments in setting a plan for sustainable long-term growth of the visitor economy over the next ten years. It is underpinned by a vision that delivers quality experiences for visitors, includes businesses that are globally competitive that are profitable, grow sustainably and providing jobs, growth and infrastructure that benefit Australian communities. The AGC welcomed the decision made on 6th October 2022 by Australian and State/Territory Tourism Ministers to adopt the THRIVE 2030 Strategy as an overarching policy driver. Geotourism Australia notes that THRIVE 2030 will now be directed by the Office of Tourism and the Visitor Economy Austrade's Canberra office which was launched on 3 November 2025.

One of the key Actions (7.5) of this strategy is to ‘grow and develop high-quality products and experiences around unique Australian locations and themes, including approaches which integrate sustainable nature tourism with economic opportunities for Traditional Owners, and reflect emerging tourism trends such as geotourism.’ The AGC was pleased to see that the goals of the AGC’s National Geotourism Strategy (NGS), are complementary to this Action, and that there is recognition within the THRIVE 2030 Strategy for the need to integrate natural and cultural heritage. These are core to the design of geotourism offerings. The AGC was also pleased to note that Action 7.7 seeks to enhance the visitor experience through use and availability of technology.’ Goal One of the NGS supports this particular action.

The inclusion of a geotourism case study within the Strategy documentation – the then ‘NSW Glen Innes Highlands aspiring GeoRegion’ – represented a major step in crystalising and advancing geotourism concepts.

Geotourism Australia was represented as a speaker to address the ICOMOS Australia 2025 National Conference, which was convened in November 2025 in Ballarat. The presentation argued that while UNESCO Global Geoparks represent the highest international standard for integrated natural and cultural conservation, Australia has pioneered a more locally adaptable model as a first step in developing any nomination for a UNESCO Global Geopark i.e., the GeoRegion. <https://bit.ly/4ol3b3H>

APPENDIX D

Guidelines for the Development of GeoRegions

As an outcome of the National Geotourism Strategy, the AGC has recommended that groups wishing to establish potential geoparks should explore various alternative options for geotourism development, such as by first establishing GeoRegions.

In Australia, GeoRegions can be single, unified geographical areas where sites and landscapes of geological significance are linked together around a central natural or cultural value. Their intended ‘bottom-up’ approach of combining conservation with sustainable development aims to involve local communities. The establishment of GeoRegions as a first exploratory step has now been accepted by the State/Territory Geological Surveys, through the auspices of the Geoscience Working Group.

It is also strongly recommended that the development of GeoRegions should include the establishment of geotrails between sites of important geodiversity, such as robust geoheritage sites, geological ‘monuments and landforms, or features recognised in state or national heritage registers.

The GeoRegion mechanism provides a framework to undertake comprehensive consultation with the full range of interested or impacted community groups (including Aboriginal communities) and to resolve any identified land-tenure conflict issues that may arise. The following provides a guide to establishing a geotourism project using this mechanism.

As a first step, a full audit of natural and cultural heritage attributes in the region is strongly recommended, as well as preliminary discussions with state-or territory-based Geological Surveys, Planning and Environment agencies, and any other designated state/territory government agencies. This early planning will help focus the work on a defined area and reduce effort by identifying localities unlikely to be suitable for geotourism purposes, having regard to land and resource management considerations.

The GeoRegion Assessment Process can be commenced by a proponent, which might include a local Council, a grouping of Councils or a Regional Development Authority, or alternatively a community or special interest group interested in geotourism development. Having completed basic scoping works, preferably including an approved tourism Destination Management Plan (DMP), the proponent now needs to seek agreement from State/Territory Government agencies to select a defined area — i.e., a GeoRegion — to be recognised as an area of special natural and cultural heritage highlighting outstanding geoheritage features within which proposed geotrails and other attractions can be developed in support of geotourism.

Stage 1: GeoRegion Assessment

The aim of this phase is to seek endorsement by way of a letter from the relevant State/Territory Geological Survey simply confirming that there is nationally or internationally significant geology in the GeoRegion. Based on this endorsement, in principle approval should then be sought from appropriate land managers and Councils, to confirm and formalise this designation.

This process should consist of early consultation with the following groups:

- relevant state/territory agencies that have land and resource management responsibilities (e.g., stock route administration, Crown Lands administration), and/or planning and environment responsibilities within the proposed GeoRegion, including the relevant Geological Survey;
- Local Councils with jurisdictional responsibilities;
- any private landowners or pastoral leaseholders to determine approval of access arrangements;
- all Native Title holders or applicants within the chosen area to discuss potential access and heritage concerns;
- other potential government stakeholders (e.g., those cited in any Tourism Destination Management Plan (DMP));
- other stakeholders, such as interested environmental / cultural heritage groups, mining and other primary industries, and Aboriginal community groups; and
- professional societies with expertise in elements of natural and cultural heritage.

Consultations with the local, regional, and state/territory tourism organisations should also be undertaken by any special interest group that has not already been involved in the preparation of a DMP.

Stage 2: Geotrail establishment

This phase consists of developing attractions within the GeoRegion. Potential attractions will have already been identified during the initial region audit, or through consultation with various stakeholders during GeoRegion establishment.

The works in this phase include:

- Development of geotrail concepts, geosites, and heritage sites etc., in association with affected LGA protected area and crown land management authorities. Objectives include obtaining approval for proposed routes and works, identifying any specific requirements relating to public safety and access, determining funding sources,

developing geotrail maintenance arrangements, and finalising geotrail nomenclature requirements.

- Continued consultation with community groups including Aboriginal Land Councils, Native Title holders and communities, and environmental and heritage groups.
- Continued consultation with other interested environmental/heritage and Aboriginal community groups, and professional societies that have expertise in elements of natural and cultural heritage, to help develop content to meet interpretation needs.
- Consultation with local school groups with an interest in using geotrails for outdoor educational purposes, as a method to support curricular requirements.
- Continuation of consultation with land-use managers to obtain final approval for implementation of the agreed works. This will need to include an assessment of the location of any geological hazards identified.
- Consultation with the designated state/territory manager for uploading of site/geotrail location and descriptive information in the online *Australian Geotourism Discovery Portal*.

Stage 3: Next Steps

Assessment and input into the further development of established GeoRegions are the responsibility of individual States / Territories, as legislation and tenure arrangements for land access are quite different in each jurisdiction. Any group wishing to establish a geopark from within an established GeoRegion will need to make representations to the designated State/Territory government agencies to determine how a proposal can be assessed, and the types of works to be undertaken within a GeoRegion before it can be processed for approval.

Dr Jon Hronsky OAM

Chair, National Geotourism Strategy Steering Committee

8 December 2023

NOTE: Guidelines approved by a meeting of the Geoscience Working Group of Australian government geoscience agencies (the GWG) on 27th November 2023

Appendix E

Strengthening Australia's International Geoscience Standing through Geotourism Excellence (Goal Six of the National Geotourism Strategy)

Using geotourism to strengthen Australia's international geoscience standing and enhance its influence for the long-term benefits of Australian geoscientists through the establishment of sister park, sister museum/rock garden, sister geological and mining heritage sites relationships, particularly with countries in the Asia-Pacific region (specifically China, Taiwan, South Korea, Japan, Vietnam, Thailand, Malaysia, PNG, and South Pacific nations etc.) has been identified as a hitherto unrealised opportunity. This imperative is also relevant for countries that enjoy 'Gondwana age' geological relationships with Australia, specifically New Zealand, and nations within South America, Africa, the Indian Subcontinent, and the Arabian Peninsula.

In June 2016, a Memorandum of Cooperation between the GSA and the Geological Society of China was executed. This Memorandum of Cooperation seeks to promote better understanding and closer cooperation between the two associations for the promotion and advancement of geotourism. At this

stage, it is proposed that any co-operation agreement could embrace areas of activity which could include the following.

- growing and enhancing the level of best practice ‘nature-based’ tourism in both China and Australia;
- progressing protection, conservation, and presentation of the geoh heritage of natural and mixed protected areas, geoparks (in China), national parks and reserves (in Australia); Australian National Landscapes and areas on the World Heritage List (as defined in the World Heritage Convention 1972) areas (both countries);
- exploring opportunities to promote ecotourism and geotourism;
- raising the profile of China and Australia as world- leading ‘nature-based’ tourism destinations;
- exploring other co-operative projects such as participation in conferences; and
- fostering the development of ‘sister park’ relationships between China and Australia.

On 9th December 2017, a historic Memorandum of Cooperation embracing a ‘sister park’ arrangement was signed between the Zhijindong Cave UNESCO Global Geopark and the Jenolan Karst Conservation Reserve. The then Reserve’s Administrator, also then a member of the GSA Geotourism Standing Committee, executed this agreement during his visit to the spectacular karst landscape in Guizhou Province in south-west China. The Reserve looks forward to sharing information and management practices, receiving delegations and greater numbers of visitors from China, and negotiating staff exchanges.

By way of follow-up, a successful Zoom meeting between Jenolan Caves & Zhijindong Cave, China was held on in June 2025. This exchange meeting represented a continuation of the collaborative activities initiated under the Memorandum of Understanding (MOU). It aimed to strengthen ties between Australia and China by fostering mutual learning in cave conservation, tourism management, and scientific research. Discussions will focus on ongoing research projects, sustainable tourism strategies, and potential future partnerships. It proved highly productive in enabling both Sides in understanding areas of geotourism management where they had made specific advances, and then sharing these experiences. It is realised that several Chinese UNESCO Global Geoparks are now keen to develop ‘sister park’ arrangements with key scenic landscape regions in Australia.

As part of ongoing efforts to strengthen the partnership between Australia and Indonesia through the Indonesia Geoparks Network (IGN) in promoting and developing geotourism, an online webinar was held on 18 October 2025. Professor David Cohen, former AGC President, delivered the opening address, welcoming participants and emphasising the importance of bilateral collaboration through such exchanges. He also highlighted current challenges in geoscience education, particularly the difficulty of attracting new students to the discipline in Australia. Dr. Martin Jutzeler from the University of Tasmania represented Australia with a presentation titled “A Multidisciplinary Approach to Natural Hazards from Submarine Volcanism and Landslides.” His insightful research generated significant interest among attendees, sparking numerous questions about how Australia and Indonesia could collaborate further, potentially through a joint working group focused on managing geohazards within geotourism activities.

The AGC and Indonesian Geoparks Network (IGN) signed a MOU in May 2023. The IGN now includes 12 UNESCO Global Geoparks as members. Apart from strengthening the friendship with Australia’s biggest and closest neighbor Indonesia, the MOU initiated tremendous opportunities of cooperation, exchange and learning especially in the areas of geotourism development, conservation management, and scientific research for long term benefits of both countries.

As an early initiative of the MOU between the AGC and the Indonesian Geopark Network, the GEOFEST 2024 Sydney Workshop was organised as an overseas workshop to form part of the major GeoFestival and International Geotourism Conference of Indonesia. The theme of the workshop was 'The Volcano as a World Class Sustainable Geotourism Destination,' and the aim of the project was to heighten awareness of the opportunity for geoscientists to be engaged in geotourism development in both countries.

The workshop was hosted by AGC together with the School of Geosciences of The University of Sydney. It comprised presentations and discussion on the first day, followed by field trips on the second day, with the third day committed to a special Wildlife Workshop www.geofest.com.au and <https://bit.ly/3YBL6F0>

Goal Six of the NGS provides for the potential for engagement with other countries in the Asia Pacific Region with strong interests in geotourism and geopark development, and this includes New Zealand where the UNESCO Global Geopark Council has approved the Waitaki Whitestone Geopark nomination to become New Zealand's first UNESCO Global Geopark.

An Australia-China Geotourism Accelerator project, supported by the Australia China Friendship Exchange Association (ACFEA) - a non-profit making, non-governmental organisation which has the primary objective of promoting friendship between Australia and China, has been initiated. The establishment of a platform is proposed to promote and develop Australia's geotourism with China by capitalising the available platform set up by the MOU signed between the GSA and the Geological Society of China (GSC) in 2016. Both Shaoguan City Government of Guangdong Province, China and its Danxiashan UNESCO Global Geopark, have expressed great interest in establishing such relationship. Discussions with potentially interested State and Local Government agencies have been initiated.